

The Verdana package – A FrankenFont \LaTeX style

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The package `verdana.sty` is a variant of Olaf Dietrich's `sfmath.sty` that implements Verdana as the text and main math font in \LaTeX documents. Because Verdana is a TrueType font, you must be using `pdf \LaTeX` or a variant to compile your document.

As well as the work of Olaf Dietrich and Stephen Hartke, this package would not be possible without the inspiration of Thierry Bouche's original `mathfont.sty` package, which showed me that it was possible to meld the text font into math usage, and thus get 'FrankenFont' documents that actually look quite reasonable.

1 Requirements

The package relies on the `arev` package by Stephen Hartke, which comes with \TeX -Live 2007 and $\text{MiK}\TeX$. It also relies on the use of either the `gtamacverdana` support files that came with `gw \TeX` , or support files for using normal Windows Verdana. The package sets both normal and sans-serif text to Verdana, and monospaced text to Bera Mono.

2 Using the `gtamacfonts`

The simplest way to use the package is to have already installed the `gtamac` fonts from the `gw \TeX` distribution. If you have these already working, all you need to do is copy the `verdana.sty` file into the `tex` part of your local `texmf` folder hierarchy and, if necessary, tell \TeX it is there in the usual way. The exact location of your `texmf` folders depends on the distribution of \TeX you are using. For example, for \TeX -Live on Mac OS X, this is `~/Library/texmf`.

If you have updated your map files to include the `gtamac` items as a matter of course, all you need to do is add the following to your document preamble:

```
\usepackage{verdana}
```

If instead you have not updated your map files and instead rely on the various `gtamac` packages to load the map file, you should add that line.

```
\usagepackage{gtamacverdana}  
\usepackage{verdana}
```

3 Using Verdana from a Windows distribution

If you do not have access to the GTAMac packages for whatever reason, you can instead use the normal Verdana TrueType font from any Windows machine, or download it.¹

1. Download or make copies of the Verdana fonts. You will need to rename them as follows:
 - Verdana (Roman) to mvdr16.ttf
 - Verdana-Bold to mvdb16.ttf
 - Verdana-Italic to mvdri16.ttf
 - Verdana-BoldItalic to mvdbi16.ttf
2. Expand the windowsverdana.zip file and move the folders inside it to the required places in your local texmf folder hierarchy.
 - Move the winverdana folder inside the tex folder somewhere into texmf/tex/latex
 - Move the winverdana folder inside the tfm folder into texmf/fonts/tfm
 - Move the winverdana folder inside the vf folder into texmf/fonts/vf
 - Move the two files with .enc endings, T1-WGL4.enc and TS1-AGL.enc into texmf/fonts/enc
 - Move the winverdana.map file into texmf/fonts/map/pdftex
 - Perform whatever procedure your T_EX distribution requires to update the maps and tell T_EX that the files exist.

You can then call the font using the windowsfont option to the Verdana package, as shown.

```
\usepackage[windowsfont]{verdana}
```

4 Contents of the package

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{verdana}[2007/10/30:
PSNFSS v.4 LaTeX package loading Verdana (TrueType) for text,
Arev math and Bera mono. LB Ellis]
\RequirePackage[T1]{fontenc}
\RequirePackage{amsmath}
\RequirePackage{arev}

\newif\if@winfont{}
\DeclareOption{windowsfont}{\@winfonttrue}

\ExecuteOptions{}
\ProcessOptions
```

¹Verdana was one of the Core Web Fonts from Microsoft. It is available from Sourceforge at http://sourceforge.net/project/showfiles.php?group_id=34153.

```

\newcommand{\@textfont}{gtamacverdana}
%%%%%%%% Windows option
\if@winfont\renewcommand{\@textfont}{mvd}
\fi

\renewcommand{\familydefault}{\@textfont}% defines text font as Verdana
\renewcommand{\sfdefault}{\@textfont}
\renewcommand{\rmdefault}{\@textfont}
\renewcommand{\ttdefault}{fvm}
\newcommand{\math@sfgreek}{zavm}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Math font - modified from sfmath.sty by Olaf Dietrich
% Change font for digits and "operators" (\sin, \exp, ...)
% to default sans serif font
\SetSymbolFont{operators}{normal}{T1}{\@textfont}{m}{n}
\SetSymbolFont{operators}{bold}{T1}{\@textfont}{b}{n}
% change letters
\DeclareSymbolFont{SFMath}{T1}{\@textfont}{m}{sl}
\SetSymbolFont{SFMath}{normal}{T1}{\@textfont}{m}{sl}

\DeclareMathSymbol{A}{\mathalpha}{SFMath}{'A}
\DeclareMathSymbol{B}{\mathalpha}{SFMath}{'B}
\DeclareMathSymbol{C}{\mathalpha}{SFMath}{'C}
\DeclareMathSymbol{D}{\mathalpha}{SFMath}{'D}
\DeclareMathSymbol{E}{\mathalpha}{SFMath}{'E}
\DeclareMathSymbol{F}{\mathalpha}{SFMath}{'F}
\DeclareMathSymbol{G}{\mathalpha}{SFMath}{'G}
\DeclareMathSymbol{H}{\mathalpha}{SFMath}{'H}
\DeclareMathSymbol{I}{\mathalpha}{SFMath}{'I}
\DeclareMathSymbol{J}{\mathalpha}{SFMath}{'J}
\DeclareMathSymbol{K}{\mathalpha}{SFMath}{'K}
\DeclareMathSymbol{L}{\mathalpha}{SFMath}{'L}
\DeclareMathSymbol{M}{\mathalpha}{SFMath}{'M}
\DeclareMathSymbol{N}{\mathalpha}{SFMath}{'N}
\DeclareMathSymbol{O}{\mathalpha}{SFMath}{'O}
\DeclareMathSymbol{P}{\mathalpha}{SFMath}{'P}
\DeclareMathSymbol{Q}{\mathalpha}{SFMath}{'Q}
\DeclareMathSymbol{R}{\mathalpha}{SFMath}{'R}
\DeclareMathSymbol{S}{\mathalpha}{SFMath}{'S}
\DeclareMathSymbol{T}{\mathalpha}{SFMath}{'T}
\DeclareMathSymbol{U}{\mathalpha}{SFMath}{'U}
\DeclareMathSymbol{V}{\mathalpha}{SFMath}{'V}
\DeclareMathSymbol{W}{\mathalpha}{SFMath}{'W}
\DeclareMathSymbol{X}{\mathalpha}{SFMath}{'X}
\DeclareMathSymbol{Y}{\mathalpha}{SFMath}{'Y}
\DeclareMathSymbol{Z}{\mathalpha}{SFMath}{'Z}
\DeclareMathSymbol{a}{\mathalpha}{SFMath}{'a}
\DeclareMathSymbol{b}{\mathalpha}{SFMath}{'b}
\DeclareMathSymbol{c}{\mathalpha}{SFMath}{'c}
\DeclareMathSymbol{d}{\mathalpha}{SFMath}{'d}
\DeclareMathSymbol{e}{\mathalpha}{SFMath}{'e}
\DeclareMathSymbol{f}{\mathalpha}{SFMath}{'f}
\DeclareMathSymbol{g}{\mathalpha}{SFMath}{'g}
\DeclareMathSymbol{h}{\mathalpha}{SFMath}{'h}

```

```

\DeclareMathSymbol{i}{\mathalpha}{SFMath}{'i}
\DeclareMathSymbol{j}{\mathalpha}{SFMath}{'j}
\DeclareMathSymbol{k}{\mathalpha}{SFMath}{'k}
\DeclareMathSymbol{l}{\mathalpha}{SFMath}{'l}
\DeclareMathSymbol{m}{\mathalpha}{SFMath}{'m}
\DeclareMathSymbol{n}{\mathalpha}{SFMath}{'n}
\DeclareMathSymbol{o}{\mathalpha}{SFMath}{'o}
\DeclareMathSymbol{p}{\mathalpha}{SFMath}{'p}
\DeclareMathSymbol{q}{\mathalpha}{SFMath}{'q}
\DeclareMathSymbol{r}{\mathalpha}{SFMath}{'r}
\DeclareMathSymbol{s}{\mathalpha}{SFMath}{'s}
\DeclareMathSymbol{t}{\mathalpha}{SFMath}{'t}
\DeclareMathSymbol{u}{\mathalpha}{SFMath}{'u}
\DeclareMathSymbol{v}{\mathalpha}{SFMath}{'v}
\DeclareMathSymbol{w}{\mathalpha}{SFMath}{'w}
\DeclareMathSymbol{x}{\mathalpha}{SFMath}{'x}
\DeclareMathSymbol{y}{\mathalpha}{SFMath}{'y}
\DeclareMathSymbol{z}{\mathalpha}{SFMath}{'z}

\DeclareMathSymbol{\imath}{\mathalpha}{SFMath}{"10}
\DeclareMathSymbol{\jmath}{\mathalpha}{SFMath}{"11}

\DeclareMathAlphabet{\mathscr}{U}{rsfs}{m}{n} % Ralph Smith Formal Script
\DeclareSymbolFont{SFMathGreek}{OT1}{\math@sfgreek}{m}{n}
\SetSymbolFont{SFMathGreek}{normal}{OT1}{\math@sfgreek}{m}{n}
\SetSymbolFont{SFMathGreek}{bold}{OT1}{\math@sfgreek}{b}{n}
% Redeclaring uppercase Greek and math accents back to Arev
% Because Verdana doesn't have Greek letters in T1 encoding
% And the T1 accents just look bad
\DeclareMathSymbol{\Gamma}{\mathalpha}{SFMathGreek}{"00}
\DeclareMathSymbol{\Delta}{\mathalpha}{SFMathGreek}{"01}
\DeclareMathSymbol{\Theta}{\mathalpha}{SFMathGreek}{"02}
\DeclareMathSymbol{\Lambda}{\mathalpha}{SFMathGreek}{"03}
\DeclareMathSymbol{\Xi}{\mathalpha}{SFMathGreek}{"04}
\DeclareMathSymbol{\Pi}{\mathalpha}{SFMathGreek}{"05}
\DeclareMathSymbol{\Sigma}{\mathalpha}{SFMathGreek}{"06}
\DeclareMathSymbol{\Upsilon}{\mathalpha}{SFMathGreek}{"07}
\DeclareMathSymbol{\Phi}{\mathalpha}{SFMathGreek}{"08}
\DeclareMathSymbol{\Psi}{\mathalpha}{SFMathGreek}{"09}
\DeclareMathSymbol{\Omega}{\mathalpha}{SFMathGreek}{"0A}
\DeclareMathSymbol{\upDelta}{\mathalpha}{SFMathGreek}{"01}
\DeclareMathSymbol{\upOmega}{\mathalpha}{SFMathGreek}{"0A}
% Accents
\DeclareMathAccent{\grave}{\mathord}{SFMathGreek}{"12}
\DeclareMathAccent{\acute}{\mathord}{SFMathGreek}{"13}
\DeclareMathAccent{\breve}{\mathord}{SFMathGreek}{"1D}
\DeclareMathAccent{\hat}{\mathord}{SFMathGreek}{"5E}
\DeclareMathAccent{\tilde}{\mathord}{SFMathGreek}{"7E}
\DeclareMathAccent{\bar}{\mathord}{SFMathGreek}{"16}
\DeclareMathAccent{\dot}{\mathalpha}{SFMathGreek}{"5F}
\DeclareMathAccent{\ddot}{\mathalpha}{SFMathGreek}{"7F}

\endinput

```